



WHERE KNOWLEDGE IS POWER

Compounding factors: Drug shortages and an aging population will combine to benefit stores

IBISWorld Industry Report OD5706

Compounding Pharmacies in the US

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About this Industry

Industry Definition

This industry includes stores that make and sell compounded medications that are not commercially available. Compounded medications

are prescriptions that are prescribed and written by physicians and prepared by pharmacists for individual patients.

Main Activities

The primary activities of this industry are

- Preparing alternate dosage forms of medication
- Preparing alternate strengths of medication
- Preparing flavored medication
- Preparing medication for patients with allergies or other sensitivities

The major products and services in this industry are

- Currently unavailable pharmaceutical manufacturing
- Pharmaceutical application alteration
- Pharmaceutical dosage alteration
- Pharmaceutical ingredient alteration
- Specialized animal pharmaceutical manufacturing

Similar Industries

32541a Brand Name Pharmaceutical Manufacturing in the US

This industry develops prescriptions and over-the-counter brand-name products that are used to prevent or treat illnesses.

32541b Generic Pharmaceutical Manufacturing in the US

This industry develops prescription and over-the-counter drug products that are used to prevent or treat illnesses in humans or animals. Generic drugs are produced without patent protection.

42421 Drug, Cosmetic & Toiletry Wholesaling in the US

This industry distributes medicines intended to diagnose, treat or prevent diseases; preparations designed to modify the appearance of physical features; and articles used in personal dressing.

44611 Pharmacies & Drug Stores in the US

This industry retails a range of prescription and over-the-counter medications, health and beauty items, toiletries and consumable goods directly to consumers on a walk-in basis.

About this Industry

Additional Resources

For additional information on this industry

www.pharmacist.com

American Pharmacists Association

www.compoundingtoday.com

CompoundingToday.com

www.iacprx.org

International Academy of Compounding Pharmacists

www.ijpc.com

International Journal of Pharmaceutical Compounding

www.pcab.org

Pharmacy Compounding Accreditation Board

www.pccarx.com

Professional Compounding Centers of America

IBISWorld writes over 700 US industry reports, which are updated up to four times a year. To see all reports, go to www.ibisworld.com

Industry at a Glance

Compounding Pharmacies in 2015

Key Statistics Snapshot

Revenue	Annual Growth 10-15	Annual Growth 15-20
\$5.6bn	2.4%	2.6%
Profit	Wages	Businesses
\$1.5bn	\$2.4bn	5,513

Market Share

There are no Major Players in this industry

Revenue vs. employment growth

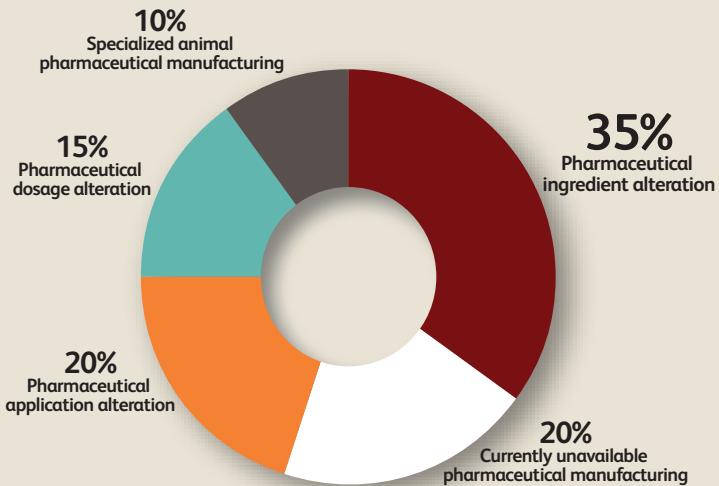


Number of pets (cats and dogs)



SOURCE: WWW.IBISWORLD.COM

Products and services segmentation (2015)



SOURCE: WWW.IBISWORLD.COM

Key External Drivers

- Number of pets (cats and dogs)
- Number of physician visits
- Regulation
- Per capita disposable income
- Number of adults aged 65 and older

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Industry Structure

Life Cycle Stage	Growth	Heavy
Revenue Volatility	Medium	Low
Capital Intensity	Low	Medium
Industry Assistance	Low	Low
Concentration Level	Low	Medium
Regulation Level		
Technology Change		
Barriers to Entry		
Industry Globalization		
Competition Level		

FOR ADDITIONAL STATISTICS AND TIME SERIES SEE THE APPENDIX ON PAGE 30

Industry Performance

Executive Summary | Key External Drivers | Current Performance
Industry Outlook | Life Cycle Stage

Executive Summary

Despite the Compounding Pharmacies industry experiencing negative media attention from contaminated compounded prescriptions, it has still proved to be indispensable. For example, compounded medications can address patients' noncompliance with their medication due to offering medication tastes, routes of administration and medication dosages that were not otherwise commercially available. Moreover, the burgeoning elderly population has stimulated demand for prescriptions, including compounded medications that were customized to

secure supplies for healthcare providers, control about 72.0% of purchases made by hospitals, according to the Healthcare Supply Chain Association, drug shortages have occurred. Due to GPOs using their market share as leverage to secure low-cost contracts with pharmaceutical manufacturers, some drug makers did not have the incentive to manufacture and stock essential drugs. As a result, industry revenue is expected to grow at an annualized rate of 2.4% to \$5.6 billion during the five years to 2015, including 7.3% growth in 2015. This growth has been driven by the number of active drug shortages increasing from 328 in 2010 to 361 in 2013, according to the latest data available from the United States Government Accountability Office. Profit is anticipated to rise from 25.7% of industry revenue in 2010 to 26.5% in 2015, due to the prescription shortage and lack of substitutes for industry products enabling the industry to garner higher prices.

During the five years to 2020, industry revenue is forecast to grow at an annualized rate of 2.6% to \$6.4 billion. As the number of physician visits is expected to rise, more individuals will likely be prescribed medications, which may stimulate demand for compounded pharmaceuticals. Overall, the size of this growth will be contingent on how many patients require medications with alternative dosages and strengths.

Doctors and patients will increasingly turn to the industry for alternate doses and strengths

address a patient's needs. However, from October to September 2012, the Food and Drug Administration (FDA) inspected about 150 compounding pharmacies, with 90.0% of facilities inspected having problems. As a result, some industry operators have exited the industry altogether or have contended with costs related to complying with FDA standards.

Nevertheless, the industry has benefited from pharmaceutical manufacturers having drug shortages, enabling the industry to access raw materials and supply medication orders to patients and hospitals. As group purchasing organizations (GPOs), which

Key External Drivers

Number of pets (cats and dogs)

In addition to developing drug compounds for humans, compounding pharmacies also create specialized drugs compounded for animals. As the number of pets increases, demand for compounding pharmacies rises, as many pet owners will purchase compounded medications to increase animal

compliance with flavoring and alternative routes of administration. The number of pets is expected to increase in 2015.

Number of physician visits

Consumers who visit doctors more frequently tend to receive more prescriptions and, in turn, purchase more medications. Therefore, patients may

Industry Performance

Key External Drivers continued

require compounded prescriptions to access drug strengths and forms that are not commercially available. The number of physician visits is expected to increase in 2015.

Regulation

The Food and Drug Administration (FDA) is encouraging large-scale operators to register with the FDA and is increasing federal regulations. As healthcare providers are increasingly purchasing compounded medications from FDA-registered and regulated facilities, many operators will choose to comply with regulations to bolster revenue volumes. Regulation is expected to increase in 2015, which represents a potential threat to the industry.

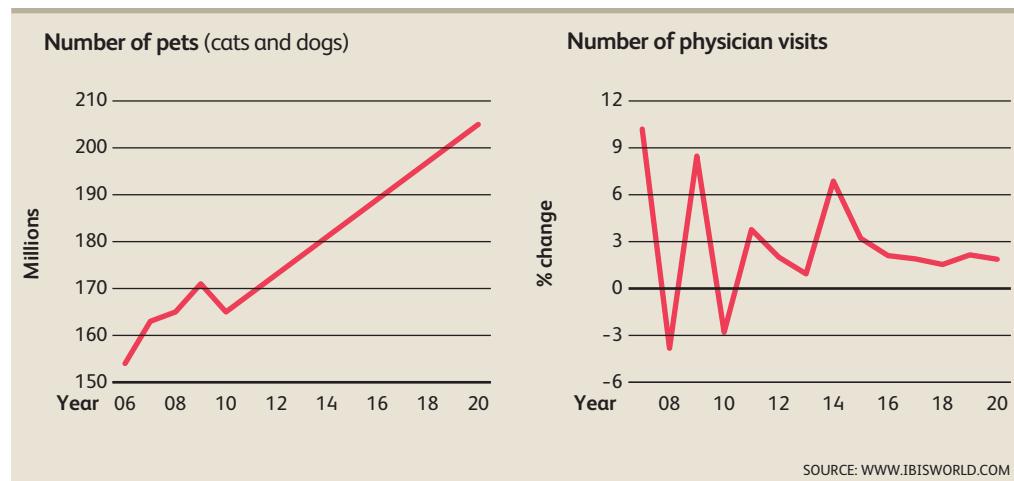
Per capita disposable income

Per capita disposable income determines consumers' ability to purchase this industry's products. While prescription products can be essential for health and

therefore less susceptible to changes in consumer discretionary spending, some of the industry's offerings, such as medicine flavorings, are subject to changes in disposable income. An increase in disposable income will boost demand for compounding pharmacies. Per capita disposable income is expected to increase in 2015.

Number of adults aged 65 and older

As the population ages, demand for various pharmaceutical products increases. Adults aged 65 and older are more likely to have chronic illnesses than younger demographics, which stimulates demand for prescriptions. Additionally, elderly individuals may require compounded prescriptions to have personalized dosage forms, flavors or medications that comply with their allergies. The number of adults aged 65 and over is expected to increase in 2015, representing a potential opportunity for the industry.



Industry Performance

Current Performance

During the past five years, the Compounding Pharmacies industry has exhibited growth, thanks to an increase in the number of dispensed prescriptions. As the burgeoning elderly population has dealt with a number of chronic illnesses that require medication, demand for compounded pharmaceuticals has risen. For example, patients have used compounded prescriptions to access medications in alternative dosages, routes of administration, ingredients (due to patient allergies) and flavorings than drugs that were commercially available. Moreover, the shortage or termination of prescriptions from drug manufacturers' product portfolio has stimulated demand for compounded prescriptions.

In the five years to 2015, industry revenue is anticipated to increase at an annualized rate of 2.4% to \$5.6 billion, including 7.3% growth in 2015, due to a rise in the number of prescription shortages. For example, according to data from the United States Government Accountability Office, the number of active drug shortages has increased from 328 in 2010 to 361 in 2013 (latest data available), which has benefited some compounding pharmacies because they were able to supply drugs to hospitals and patients that may have otherwise come from another source. Profit is expected to increase from 25.7% of industry revenue in 2010 to 26.5% in 2015, due to the prescription shortage enabling operators to mark up industry product prices.

Pharmaceutical awareness

During the past five years, many Americans have purchased pharmaceuticals to treat their health ailments. According to the Pharmaceutical Research and Manufacturers of America (PhRMA), about 3.6 billion prescriptions are dispensed in the United States each year. The US Pharmacopeia Convention estimates that 30.0 million to 40.0 million of those prescriptions are compounded medications. Over the past five years, numerous trends have increased patient utilization rates of compounded medications. For example, rising healthcare awareness and growth in the number of overall physician visits have bolstered demand for prescriptions and provided a boon to the industry. Moreover, as more patients addressed their allergies to certain drugs and their medication preferences, such as medication that have a different dosage strength, route of administration or flavoring than drugs that were commercially available, demand for compounded medications has increased.

Rising healthcare awareness and spending on pharmaceuticals benefited industry firms

A relative lack of regulation has had mixed effects on the industry. For instance, pharmaceutical manufacturers contend with high costs from generating brand awareness and complying with FDA regulations, which incites manufacturers to limit their product portfolio. While many compounding pharmacies opted for regulation to achieve credibility for their compounding process, such as accreditation with the Pharmacy Compounding Accreditation Board to ensure quality and sterility in their compounding facilities, only 163 pharmacies in the United States were accredited in 2013 (latest data available). As a result, costs for complying with regulation are relatively low when compared with

Industry Performance

Pharmaceutical awareness continued

pharmaceutical manufacturers. This has enabled compounding pharmacies to address drug shortages with few financial barriers.

As the number of prescription drug shortages grew, compounding pharmacies were able to help alleviate these shortages by having access to raw materials and downstream markets, such as patients and hospitals. For example, according to the Congressional Research Service's (CRS) Compounded Drugs report, 62.0% of hospitals outsourced compounded drugs due to drug shortages, to ensure drug stability (69.0%) and to extend drug shelf life

(62.0%). However, drug shortages have been particularly prominent among sterile injectable generic drugs, which are difficult to compound safely.

Compounding pharmacies have recalled some products, due to not meeting the FDA's standards. This trend has further exacerbated the drug shortage. For example, according to data from the CRS, 48.1% of hospitals reported that a shortage of compounded sterile products would have a significant impact on patient care, whereas 16.6% and 11.5% of hospitals reported that it would result in either an inconvenience or a major disruption to patient care, respectively.

Booming opportunity

Nevertheless, the burgeoning elderly population has provided a boon for the industry. The number of adults aged 65 and older is expected to grow at an annualized rate of 3.4% during the five years to 2015. More elderly patients have visited their physician, which has stimulated demand for prescriptions.

Because the burgeoning elderly population has required more prescriptions to address their numerous chronic illnesses, demand for compounded pharmaceuticals has grown. For example, as the number of stroke patients rose, so did the prevalence of dysphagia, or a patient's inability to swallow. As a result of this trend, demand for compounded medications with alternative routes of administration increased.

As the growing elderly population required more prescriptions, demand for the industry increased

Additionally, the industry also provides compounded medications for pets. The number of pet owners is expected to grow at an annualized rate of 2.3% during the five years to 2015. Because of this growth, more pet owners will be required to obtain compounded drugs to increase their pet's compliance with medications. For example, pet owners may demand compounded drugs to cater to their pets' individualized needs, such as allergies and complications with the drug's route of administration.

Enterprises and employment

During the five years to 2015, industry enterprises are expected to exhibit relatively slow growth at an annualized rate of 0.7% to 5,513 operators. While many firms have entered the industry to cater to local patients and hospitals that have required compounded medications,

this trend was offset by the FDA inspecting and recalling contaminated compounded prescriptions. Overall, this trend has constrained the number of industry operators that sought to enter the industry. In 2012, the New England Compounding Center distributed steroid

Industry Performance

Enterprises and employment continued

medications that treated back and joint pain that was contaminated with fungus. This drug infected 751 people with fungal meningitis and subsequently killed 64 people, according to the Centers for Disease Control and Prevention.

Hospitals and other healthcare providers were encouraged to purchase compounded prescriptions from compounding facilities that were subject to FDA oversight and

some compounding pharmacies were not willing to incur costs from inspections and complying with the FDA's requirements. Because of these trends, the number of employees is anticipated to increase at an annualized rate of 1.2% to 116,939 during the five-year period, as some compounding pharmacies have required more employees to help ensure sterility in compounding laboratories.

Industry Outlook

During the next five years, the Compounding Pharmacies industry is expected to benefit from more pharmacies addressing negative media attention from contaminated drugs by registering with the FDA. Moreover, as the elderly population will continue to require a high volume of prescriptions, demand for compounded drugs will increase because some patients will require medications with alternative dosages and strengths that are not commercially available.

Furthermore, as prescription drug shortages continue to occur, which may be partly attributable to the termination of drugs by pharmaceutical manufacturers, patients will need compounded medications to address their health ailments and supply their prescriptions. During the five years to 2020, industry revenue is forecast to grow at an annualized rate of 2.6% to \$6.4 billion, which can be attributed to



SOURCE: WWW.IBISWORLD.COM

need-based demand for industry products and the lack of a viable substitute. Profit is expected to slightly rise from 26.5% of industry revenue in 2015 to 27.1% in 2020, due to high sales volumes offsetting costs related to complying with regulations.

Rising incomes and aging Americans

Consumers' per capita disposable income is linked to demand for compounded pharmaceuticals. For example, many pharmacy benefit managers (PBMs), which are responsible for processing and paying prescription drug claims, have increasingly limited their coverage of compounded drugs. In 2014, Express Scripts, a major PBM, announced that it would no longer cover about 1,000 active ingredients used

by compounding pharmacies. As many PBMs attempt to cut costs in response to the rising cost of prescription drugs, they may lower their coverage of compounded drugs. In particular, in 2012, the National Council on Prescription Drug Programs permitted compounding pharmacies to bill for all ingredients used in the compounded drug, rather than for the most expensive ingredient.

Industry Performance

Rising incomes and aging Americans continued

Moreover, although compounded drugs make up a small share of total pharmaceuticals, the cost of compounded drugs made with bulk drug substances, such as baclofen (a muscle relaxer) and gabapentin (an anticonvulsant), is rising. In response, PBMs may exclude coverage of industry products. Overall, consumers' per capita disposable income will be a key driver for compounded drugs because many customers will have to pay for industry products out of pocket. In

addition, the burgeoning elderly population will provide opportunities for the industry. For example, pharmaceutical manufacturers may produce a drug that does not have the appropriate dosage for elderly individuals, which stimulates demand for compounded medications. Age-related changes, such as medication absorption, distribution, metabolism and excretion, may cause a patient to require compounded prescriptions, bolstering industry revenue.

Drug shortages

Additionally, drug shortages will bolster demand for compounding pharmacies. In 2013 (latest data available), the United States Government Accountability Office (GAO) reported that there was a shortage of about 361 active drugs, which is expected to continue an upward trend over the five-year period. In particular, many drugs included in the shortage were generic sterile injectable drugs. Typically, drug shortages have involved cancer drugs, anesthetics for patients undergoing surgery and electrolytes for patients with intravenous fluids. Consequently, compounding pharmacists that can efficiently manufacture drugs in a sterile environment during a shortage will likely develop favorable supply-side contracts with healthcare providers. Many compounding pharmacies have access to raw materials and can increase their production quickly during a shortage.

However, the regulatory landscape will likely become more stringent. More compounding pharmacies have opted to

Drug shortages will bolster demand for compounding pharmacies over the period

register with the FDA through the Drug Quality and Security Act, giving compounding pharmacies the oversight necessary to develop confidence among healthcare providers and patients. In January 2014 (latest data available), 11 compounding pharmacies have elected to adhere to current good manufacturing standards and FDA inspections, which will likely increase over the five-year period. In particular, sterile compounding facilities, which manufacture drugs that are at high risk for contamination, are expected to increasingly adhere to FDA regulations. With FDA inspections, compounding pharmacies are considered outsourcing facilities, which enables industry operators to provide industry services in bulk to hospitals and physicians when individual prescriptions are not required.

Enterprises and employment

During the five years to 2020, the number of industry enterprises is expected to grow at an annualized rate of 0.5% to 5,643 operators. While new

entrants will enter the industry due to low regulation and the lack of substitutes for compounded medications, many compounding pharmacies will still be

Industry Performance

Enterprises and employment continued

wary of being subject to additional regulations. Compounding pharmacies will continue to move from local pharmacies that provide customized patient prescriptions toward pharmacies that provide physicians with compounded prescriptions in bulk for future use.

While outsourcing facilities will increasingly register with the FDA to supply compounded medications to

hospitals, pharmacies that do not register with the FDA will be regulated by the state boards of pharmacy and only able to supply patients with prescriptions. During the five-year period, the number of industry employees is expected to grow at an annualized rate of 0.3% to 118,455, as more compounding pharmacies require laboratory technicians to maintain sterile facilities and comply with current good manufacturing practices.

Industry Performance

Life Cycle Stage

The industry is expected to grow faster than the economy during the 10 years to 2017

Customer acceptance of industry products is growing

The number of new facilities being built is experiencing slow growth



Industry Performance

Industry Life Cycle

This industry
is **Growing**

Industry value added (IVA), which measures an industry's contribution to the overall economy, is expected to grow at an annualized rate of 3.2% during the 10 years to 2020. Comparatively, GDP is anticipated to increase at an average annual rate of 2.5% during the ten-year period. While contaminated compounded medications have gained negative media attention, drug shortages have still bolstered demand for compounded prescriptions. As consumers continue to require compounded prescriptions to address allergies, provide alternative routes of drug administration as well as dosages or strengths that were not commercially available, the industry will experience stable need-based demand.

While industry operators will increasingly contend with regulation, registering with the FDA will allow compounding pharmacies to be considered outsourcing facilities, which will enable industry operators to supply hospitals with compounded medications in bulk. As the elderly population requires more medications to address their chronic illnesses, demand for compounded prescriptions will also grow, as operators individually tailor prescriptions to meet a patient's dosage or route of administration needs. As consumers become more aware of their health, more individuals will be willing to incur out-of-pocket costs for compounded prescriptions, which benefits the industry.

Products & Markets

Supply Chain | Products & Services | Demand Determinants
 Major Markets | International Trade | Business Locations

Supply Chain

KEY BUYING INDUSTRIES

- 62111a Primary Care Doctors in the US
 Primary care doctors provide unspecialized patient care, which may require compounded medications for patients with allergies and other conditions.
- 62111b Specialist Doctors in the US
 Specialist doctors practice specialized medicine, such as oncology, and require compounded medications for patients that are allergic or cannot take manufactured pharmaceuticals.
- 62149 Emergency & Other Outpatient Care Centers in the US
 Industry operators provide emergency, general or specialized outpatient care.
- 62211 Hospitals in the US
 Hospitals provide surgical and nonsurgical diagnostic as well as medical treatment to inpatients with medical conditions, which includes compounded medications.
- 99 Consumers in the US
 Households are the main consumers of products sold by the industry.

KEY SELLING INDUSTRIES

- 32518 Inorganic Chemical Manufacturing in the US
 This industry manufactures inorganic chemicals, which are included in most pharmaceutical compounds.
- 32541a Brand Name Pharmaceutical Manufacturing in the US
 This industry manufacturers brand-name pharmaceutical medications that are used by compounding pharmacies.
- 32541b Generic Pharmaceutical Manufacturing in the US
 This industry manufactures basic pharmaceutical compounds that are used by compounding pharmacies.
- 32541d Vitamin & Supplement Manufacturing in the US
 This industry manufactures vitamin and supplements, which the industry may use to enhance vitamins in compounded medications.
- 33911a Medical Instrument & Supply Manufacturing in the US
 This industry manufactures medical instruments, which the industry uses to mix and measure drug compounds.

Products & Services

According to data from the Cleveland Clinic, about 56.0% of compounded pharmaceuticals were made for a specific patient, compared with 44.0% of drugs being prepared in anticipation of demand from downstream markets (e.g. hospitals).

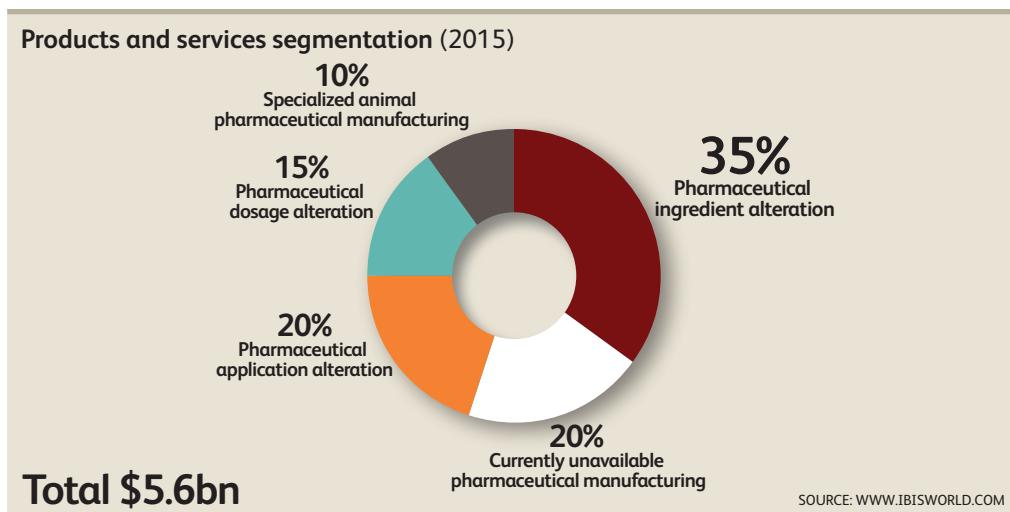
Pharmaceutical ingredient alteration

The primary service offered by compounding pharmacies is the manufacturing of pharmaceuticals with alternate ingredients, which accounts for 35.0% of the industry. Alternate ingredients are often used because of allergies or other conditions that prevent

a customer from using the standard pharmaceutical product. Typically, this process involves remaking the drug without gluten or colored dyes. Also, the pharmacist may add flavoring agents, such as adding bubble gum or grape flavors, to a pharmaceutical to increase medication compliance among children. As the burgeoning elderly population has had numerous chronic illnesses over the past five years, demand for this product segment has increased, due to many individuals being concerned about their medications interfering with other treatments.

Products & Markets

Products & Services continued



Pharmaceutical application alteration

Due to a disability, such as an inability to swallow medication in pill form for a stroke patient, some patients need existing pharmaceutical medications that have a different route of administration. For example, different formulation may include medications administered in liquid, rather than pill, form. In this case, compounding pharmacists are required to rebuild the drug in a way that can be applied to the patient differently.

Typically, pharmacists change pill drugs into a liquid or transdermal (i.e. able to be absorbed into the skin) gel form. The process of pharmaceutical application alteration makes up 20.0% of industry revenue. Over the next five years, as the number of stroke victims, which often have difficulty swallowing medication, is likely to increase, this product segment will also grow.

Currently unavailable pharmaceutical manufacturing

Manufacturing currently unavailable pharmaceuticals also accounts for 20.0% of the industry. Traditional pharmacies regularly experience shortages of specific drugs. In the case of shortages, the raw materials needed to make the drug are in short supply, or the pharmaceutical

manufacturer cuts production due to low profitability. When this occurs, patients that need that drug will have a compounding pharmacy manufacture a small batch of the drug. Over the past five years, this product segment has exhibited stagnant growth, as many large pharmaceutical companies switched from batch pharmaceutical manufacturing to continuous mass production, which constrained costs and the number of pharmaceuticals off production.

Pharmaceutical dosage alteration

Mass-produced pharmaceuticals are only commercially available in a few dosage sizes. A patient will have a compounding pharmacy manufacture the drug in a dosage that is commercially unavailable. This service is primarily used for young children, who require dosages lower than the ones that pharmaceutical manufacturers typically offer. Pharmaceutical dosage alteration makes up 15.0% of industry revenue. Over the past five years, this product segment has remained stagnant.

Specialized animal pharmaceutical manufacturing

Compounding pharmacies also serve animal patients; this type of

Products & Markets

Products & Services continued

manufacturing accounts for 10.0% of the industry. Firms typically provide ingredient or application alteration services. The ingredient alteration services are used for animals with specific allergies or animals that will only ingest medicines with an appealing

flavor. Application alteration services are also used to assist animals with ingesting a medicine willingly. During the past five years, this product segment has steadily increased, as demand for compounded medications rose in line with more pet owners.

Demand Determinants

The main drivers affecting demand for compounding pharmacies are consumer incomes and the population's health. Only 1.0% to 2.0% of consumers suffer from allergies or other conditions that require specialized drugs from compounding pharmacies. In general, these consumers can take the unaltered pharmaceutical, but they use compounding pharmacies to manufacture pharmaceuticals that are easier to take, by altering the flavor or application method. This kind of demand is somewhat sensitive to changes in per capita disposable income; as consumer per capita disposable income declines, more consumers will purchase the standardized manufactured

pharmaceutical if it is more affordable. Additionally, health insurance companies do not always reimburse consumers who use compounding pharmacies, which constrains demand for compounded prescriptions when consumers cannot incur high out-of-pocket healthcare costs.

However, most customers of compounding pharmacies require their services regardless of the cost. Demand from these customers moves with the general health of the population. The United States population is aging, with more individuals suffering from numerous chronic illnesses, which stimulates demand for compounded medications.

Major Markets

While many individuals require individually tailored compounded medications, age demographics that are typically noncompliant with medications (individuals aged 18 and younger) and elderly individuals with a plethora of chronic illnesses are the main consumers of compounding pharmacies. For example, younger individuals, under the age of 19, are more likely to require medications with alternative applications, due to not being able to take their medication in pill form or due to preferences for particular flavors. Comparatively, elderly individuals comprise a larger market share due to their numerous

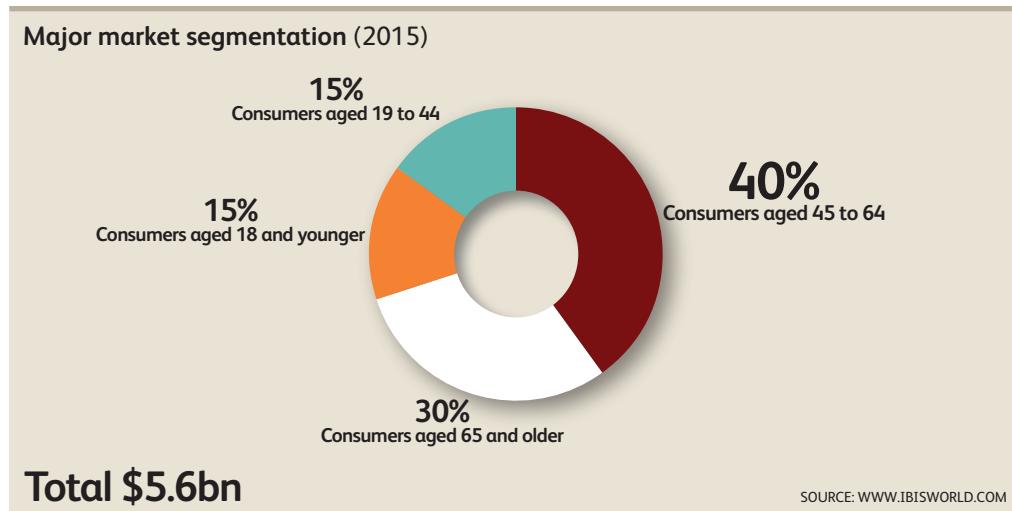
health ailments, which increases demand for prescriptions.

Individuals aged 18 and younger

Consumers aged 18 and younger also represent a disproportionately large part of industry revenue, accounting for about 15.0% of total revenue in 2015. Aside from the elderly, young children are most likely to have allergies to pharmaceutical compounds, as well as require a special dosage and application method to increase their compliance with medications. During the next five years, demand for compounded medications from this market segment will increase, as more stringent FDA regulations incite

Products & Markets

Major Markets continued



more parents to purchase compounded medications for their children.

Individuals aged 19 to 64

The adult population, aged 19 to 64, makes up 55.0% of industry revenue in 2015. During the past five years, this market segment exhibited stable need-based demand, as many individuals required compounded medications with a specific dye due to allergies or gluten-free ingredients for dietary requirements. Furthermore, this demographic demanded compounded drugs due to their low-cost prices, relative to brand-name pharmaceuticals, and accessibility during drug shortages.

Individuals aged 65 and older

According to the US Department of Health and Human Services, consumers aged 65 and over are estimated to account for about 30.0% of pharmaceutical expenditures, indicating that the senior population is one of the primary markets for compounding pharmacies. This age group has a relatively high drug-prescribing pattern, which is due to the number of chronic diseases and disorders and the limited number of non-drug alternatives. The aging baby boomer population has been a key factor of sustained growth in the Compounding Pharmacies industry. As the average age of the US population continues to increase, the volume of drugs prescribed by doctors continues to rise.

International Trade

The Compounding Pharmacies industry only operates domestically, due to the need for compounding pharmacies in proximity to patients and local healthcare providers.

Products & Markets

Business Locations 2015



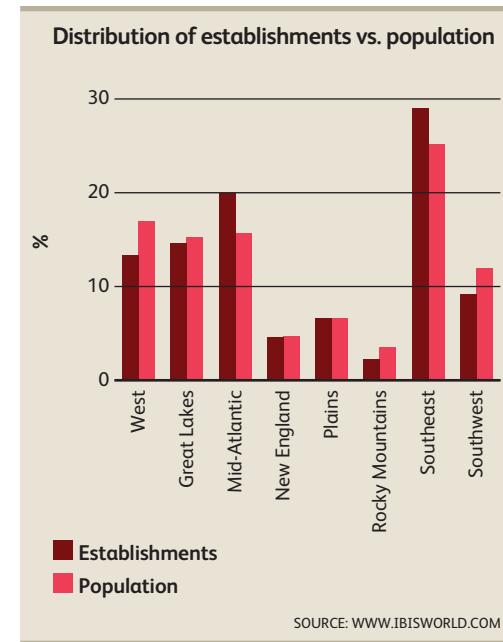
Products & Markets

Business Locations

The Compounding Pharmacies industry typically follows the dispersion of the US population. Due to the industry providing customized compounded medications for individual patients, locating in proximity to shopping centers and areas with high foot traffic are essential for industry operators. For example, the Mid-Atlantic region accounts for 20.0% of compounding pharmacies, while also making up 15.5% of the population. Additionally, the Southeast and West comprise 29.1% and 13.4% of establishments, while also totaling 25.4% and 17.1% of the population, respectively.

Many compounding pharmacies also locate near local hospitals, healthcare providers and veterinarians that dispense compounded prescriptions to pet owners and patients alike. Furthermore, access to downstream markets, such as veterinarians, provides compounding pharmacies with the networks necessary to obtain referrals and generate sales volumes. While most compounding pharmacies are independently operated, boutique pharmacies that cater to local clientele, the industry will increasingly include large operators. For example, as companies can register with the FDA and be labeled as an outsourcing facility, which allows operators to provide hospitals with compounded pharmaceuticals in bulk, the emergence of large operators with numerous establishments will occur.

Also, industry operators typically locate near the elderly, a demographic that demands compounded medications to address issues with administering their medications, such as manufactured



SOURCE: WWW.IBISWORLD.COM

prescriptions with high dosages. Florida also has a high share of establishments, with 6.8% of total industry establishments. This state has a large share of individuals aged 65 or older, with the elderly demographic accounting for 18.0% of the state's population. Additionally, Pennsylvania has a high share of industry establishments, with 5.0% of the industry's establishments, while also having an elderly population that accounts for 15.6% of the state's population. Over the next five years, states with high elderly populations will incite industry entrants to enter the market. For example, stroke patients may have difficulty swallowing, which increases demand for compounded pharmaceuticals in liquid, rather than pill, form.

Competitive Landscape

Market Share Concentration | Key Success Factors | Cost Structure Benchmarks
 Basis of Competition | Barriers to Entry | Industry Globalization

Market Share Concentration

Level
 Concentration in
 this industry is Low

The Compounding Pharmacies industry exhibits a low market share concentration, with no firm accounting for 5.0% of total revenue in 2015. Unlike pharmaceutical companies that mass produce medications, compounding pharmacists individually tailor prescriptions to meet specific patient needs, which limits the industry's ability to benefit from cost synergies from economies of scale.

In addition, the Food and Drug Administration (FDA) will bring suit

against any operator it expects is mass producing pharmaceuticals rather than altering them for specific customers. In fact, the FDA has claimed that large compounding pharmacies, such as Wedgewood Pharmacy, are skirting its regulations on mass-produced pharmaceuticals. While the FDA has so far been unsuccessful in suing these companies, the threat of its intervention has prevented firms from establishing a large-scale pharmaceutical compounding operation.

Key Success Factors

IBISWorld identifies 250 Key Success Factors for a business. The most important for this industry are:

Experienced work force

Successful operators must employ individuals who have the accreditation to manufacture safe and effective pharmaceuticals.

Ability to attract local physician recommendations

When prescribing specialty medicines, physicians typically recommend a compounding pharmacy to their patients. The development of relationships with local physicians is important to building a customer base.

Having a loyal customer base

Because they service a small percentage of the population, compounding pharmacies rely on returning customers. An operator that has trouble holding on to customers may struggle to generate sufficient revenue.

Proximity to key markets

Consumers typically choose the geographically closest compounding pharmacy. Therefore, operators must locate near population centers.

Cost Structure Benchmarks

Profit

In 2015, the Compounding Pharmacies industry is expected to generate a robust profit margin (measured as earnings before interest and taxes), accounting for 26.5% of total industry revenue. While profit margins are high for the pharmaceutical sector as a whole, industry operators typically have higher margins, which can be attributed to the industry offering a specialized service with no direct substitutes. However, profit margins vary according to industry operators' product portfolio and clientele.

For example, compounding pharmacies that utilize a variety of

ingredients and dosage forms for more patient clinical conditions, or have upgraded facilities for compounding medications, typically have higher profit margins. Furthermore, industry operators that develop contracts with physicians, hospitals and medical clinics will have higher profit margins, compared with compounding pharmacies that work directly with patients on an individual basis. In particular, pharmacies that provide prescriptions during a long-term shortage of critical medications will have high profit margins until the pharmaceutical supply is revived.

Competitive Landscape

Cost Structure Benchmarks continued

Wages

Wages are estimated to comprise the largest share of industry revenue, with 43.2% of total industry revenue in 2015. While the industry does require licensed pharmacists, who require completion of pharmacy school and expertise pertaining to the compounding of pharmaceutical ingredients, all employees are not specialized. For example, pharmacy technicians assist compounding pharmacists with dispensing compounded medications to clients or health professionals. Many pharmacy technicians and other staff work part-time or on an hourly basis, which lowers wages.

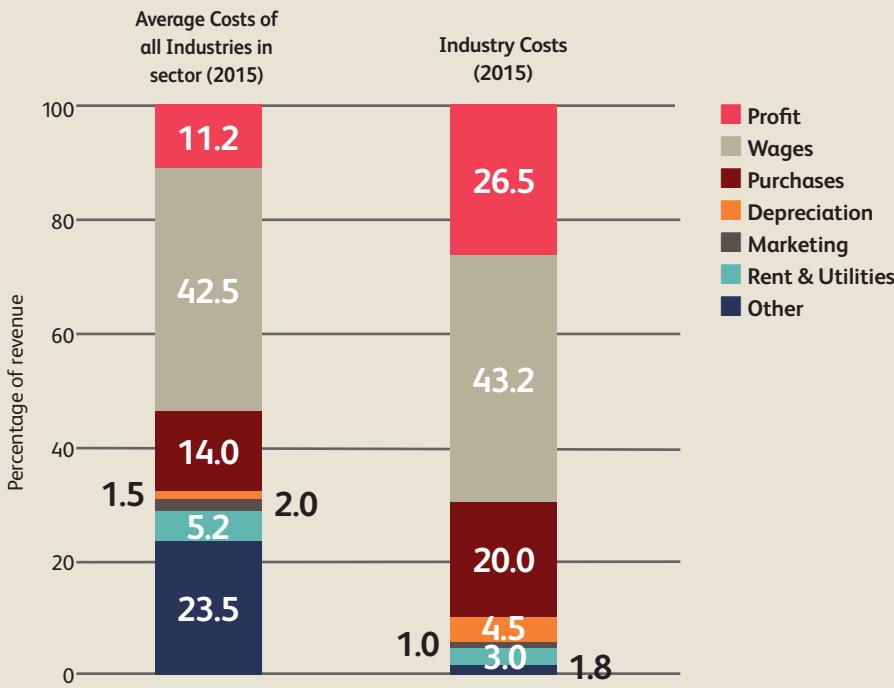
Purchases

Purchases make up the second-largest expense for compounding pharmacies, representing about 20.0% of total industry revenue in 2015. The primary

goods purchased by this industry are basic chemicals, compounds and pharmaceuticals that operators combine to create the specialized medicines sold by the industry. Compounding pharmacies also require compounding equipment and an inventory of prescriptions.

For example, common equipment utilized by compounding pharmacies include technology that circulates air, which is vital for working with hazardous materials and maintaining sterility. Industry operators also need to purchase specialized medical cabinets for particular medications, to protect medication that can be inactivated by chemical decontamination. Purchases have increased as a share of revenue in the five years to 2015, due to increases in the prices of the raw materials necessary to make these chemicals.

Sector vs. Industry Costs



SOURCE: WWW.IBISWORLD.COM

Competitive Landscape

Cost Structure Benchmarks continued

Other costs

Depreciation, rent and utilities account for a small cost for compounding pharmacies, with about 7.5% of total industry revenue in 2015. These costs are associated with the laboratories and other facilities necessary to manufacture pharmaceuticals. Other costs include marketing, liability insurance and legal costs. Compounding pharmacies require marketing to appeal to physicians and veterinarians, via newsletters, newspaper and radio advertisements.

Additionally, many compounding pharmacies will incur costs from applying and renewing their association membership on an annual basis, such as the Pharmacy Compounding Accreditation Board. If a compounding pharmacy chooses to be monitored by the FDA or an association, they will incur fees from on-site inspections. According to Medicare consultants, it costs the average compounding pharmacy facility \$35,000 to comply with FDA regulations.

Basis of Competition

Level & Trend
Competition in this industry is **Medium** and the trend is **Steady**

Firms in the Compounding Pharmacies industry face moderate competition. Competition within the industry stems only from other regionally located firms, due to the industry providing services that lack substitutes. While operators compete on the basis of price, the industry will increasingly generate clientele on the basis of reputation. For example, while the industry is becoming more exposed to regulation, the industry is still experiencing negative media attention from patient deaths and illnesses related to contaminated compounded medications. As a result, industry operators that can generate positive word-of-mouth for compounded medications that are manufactured in sterile environments will likely have a large customer following. Industry operators that develop safe compounded medications that are known for their efficacy will generate high sales volumes. Furthermore, more operators will move toward opting to register with Pharmacy Compounding Accreditation Board and the US Food and Drug Administration's current good manufacturing practices to meet standards for quality in the compounding process.

Compounding pharmacies that are prone to regulation will have an advantage over nonregulated industry operators, which will benefit regulated compounding pharmacies in securing favorable contracts with local physicians, hospitals and medical clinics. Additionally, compounding pharmacies will compete to respond to address shortages of manufactured medications for critical conditions or illnesses, which will benefit operators that have the large compounding facilities and access to raw drug ingredients necessary to manufacture drugs during a shortage. Operators also compete to develop networks with physicians and the healthcare sector, which will benefit operators when patients are referred to compounding pharmacies for specialized medications that are compatible with their allergies, medication strength or other customized prescription needs. Moreover, industry operators also compete to develop networks with downstream industries, such as veterinarians, to be referred when a pet owner requires a compounded prescription for their pet.

Competitive Landscape

Barriers to Entry

Level & Trend

Barriers to Entry in this industry are **Medium** and **Steady**

New entrants to the Compounding Pharmacies industry face moderate barriers to entry. The largest barrier to entry for potential industry entrants includes hiring a specialized work force, which is typically comprised of lab technicians and a pharmacist. Employees must be trained in how to handle and manufacture pharmaceutical products, and firms face competition in hiring employees from traditional pharmaceutical manufacturers and pharmacies. Additionally, compounding pharmacies that specialize in sterile compounding, such as the preparation of injectable drugs and medication that goes into patients' body cavities or sterile areas, incur higher costs for purchasing equipment and maintaining a sterile environment to lower the risk for contamination.

Furthermore, sterile compounding operators also potentially incur costs related to liability issues, which could pose as a potential barrier for potential industry entrants. Many compounding pharmacies have networks with major healthcare systems, which poses as a barrier to entry for small, boutique compounding pharmacies that appeal to local clientele and want to work with healthcare providers. While Accreditation with the Pharmacy Compounding Accreditation Board, which allows operators to achieve legitimacy via regulated operations, can allow potential industry entrants to secure contracts with

Barriers to Entry checklist	Level
Competition	Medium
Concentration	Low
Life Cycle Stage	Growth
Capital Intensity	Low
Technology Change	Low
Regulation & Policy	Heavy
Industry Assistance	Low

SOURCE: WWW.IBISWORLD.COM

hospitals, fewer than 5.0% of compounding pharmacies nationwide achieve accreditation, which could limit a compounding pharmacy from entering the industry.

In addition, compounding pharmacies must invest in facilities, including a sterile laboratory, suitable for manufacturing pharmaceuticals. Finally, compounding pharmacies typically operate solely in small geographic regions and compete against other industry operators within that region. For a new entrant to be successful, it must find a region in which the existing compounding pharmacies are not meeting the demand from a small customer pool. While being monitored by the FDA is not required for industry operators, many will choose to comply with regulations to build legitimacy and attract healthcare providers. According to MediFare consultants, it costs the average compounding pharmacy facility \$35,000 to comply with FDA regulations, which is a significant fixed cost for industry entrants.

Industry Globalization

Level & Trend

Globalization in this industry is **Low** and the trend is **Steady**

Operators in this industry are US-owned and derive most of their revenue from the US consumer market. Some companies, such as MIT Holding, also sell products to international markets. However, these

operations only account for a small portion of total revenue, since local compounding pharmacies dominate their respective region with demand from local consumers and healthcare providers.

Major Companies

There are no Major Players in this industry | Other Companies

Other Companies

The Compounding Pharmacies industry is typified by a high level of fragmentation. Typically, industry operators are located near local downstream markets, such as hospitals and doctors' offices, in order to fill customized prescriptions. While local, boutique compounding pharmacies will continue to make up the majority of industry operators, compounding pharmacies will expand to include national operations, which will become possible as the FDA will consider large industry operators that provide compounded prescriptions in bulk to hospitals as outsourcing facilities. Nevertheless, no industry operator accounts for 5.0% of industry revenue.

Wedgewood Pharmacy

Estimated market share: 1.5 %

Founded in 1980 and based out of Swedesboro, NJ, Wedgewood Pharmacy is one of the largest compounding pharmacies in the United States. The pharmacy serves more than 30,000 prescribers of compounded medications and has about 7,300 preparations for animals. Because of Wedgewood's large size, the FDA has actually accused the company of mass-producing pharmaceuticals, although the company has disputed the FDA. Popular compounded pharmacy preparations include: urology, obstetrics and gynecology, addiction, dentistry, endocrinology and dermatology.

The company obtains active pharmaceutical ingredients from FDA-registered suppliers, and is registered with the Pharmacy Compounding Accreditation Board's Seal of Accreditation. Typically, healthcare professionals demand compounded pharmacy products when a medication is only available in compounded form, a patient is allergic to a specific ingredient in the manufactured medication, a

patient requires medication in another form or flavor, a drug has been removed from the market for nonsafety related reasons and a drug is not available due to a shortage. Due to the company being privately held, financial information is estimated. IBISWorld expects the company's industry-relevant revenue to reach \$86.6 million in 2015.

Dougherty's Pharmacy

Estimated market share: Less than 1.0 %

Founded in 1929, Dougherty's Pharmacy provided compounded drugs to individuals across Texas. The company's product portfolio of compounded drugs include liquid pediatric versions of adult drugs, medications that may no longer be in stock or have been discontinued by pharmaceutical manufacturers. In addition, the company provides gluten-, dye- or sugar-free medications. In addition, the company has been seeking accreditation with the Pharmacy Compounding Accreditation Board. In 2015, the company is expected to generate \$2.8 million in industry-relevant revenue.

Village Compounding Pharmacy

Estimated market share: Less than 1.0 %

Founded in 1979, Village Compounding Pharmacy is located in Houston and serves the local area. The company has been accredited through the Pharmacy Compounding Accreditation Board (PCAB) since 1981. Village Compounding Pharmacy provides customized prescriptions to limit patient noncompliance. For example, many patients are allergic to dyes and preservatives or are sensitive to standardized drug strengths. Additionally, the company offers several unique forms of prescription compounding applications, such as transdermal gel. Prescription services include bioidentical hormone replacement therapy, natural hormone

Major Companies

Other Companies continued

replacement therapy, alternative pain medication and pain relief treatment, among other prescriptions in the

company's product portfolio. In 2015, the company is estimated to generate \$2.7 million in revenue.

Operating Conditions

Capital Intensity | Technology & Systems | Revenue Volatility
Regulation & Policy | Industry Assistance

Capital Intensity

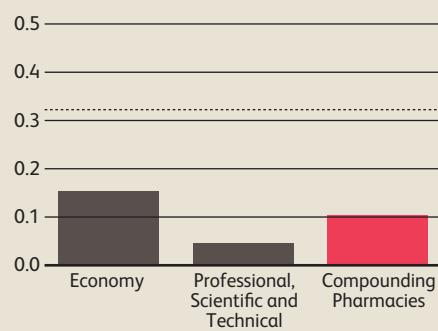
Level

The level of capital intensity is **Low**

The Compounding Pharmacies industry exhibits a low level of capital intensity. In 2015, for every dollar spent on wages, the industry incurs \$0.11 in capital costs. While the industry incurs capital costs, such as laboratory equipment and technology that sterilizes and provides airflow to the compounding laboratory, the industry still requires a specialized workforce. Industry employees must be trained in the handling and manufacturing of pharmaceuticals, and accredited pharmacists typically receive higher wages. Wages comprise the largest share of industry revenue, with 43.2% of total industry revenue in 2015, due to compounding medications being labor intensive.

Capital intensity

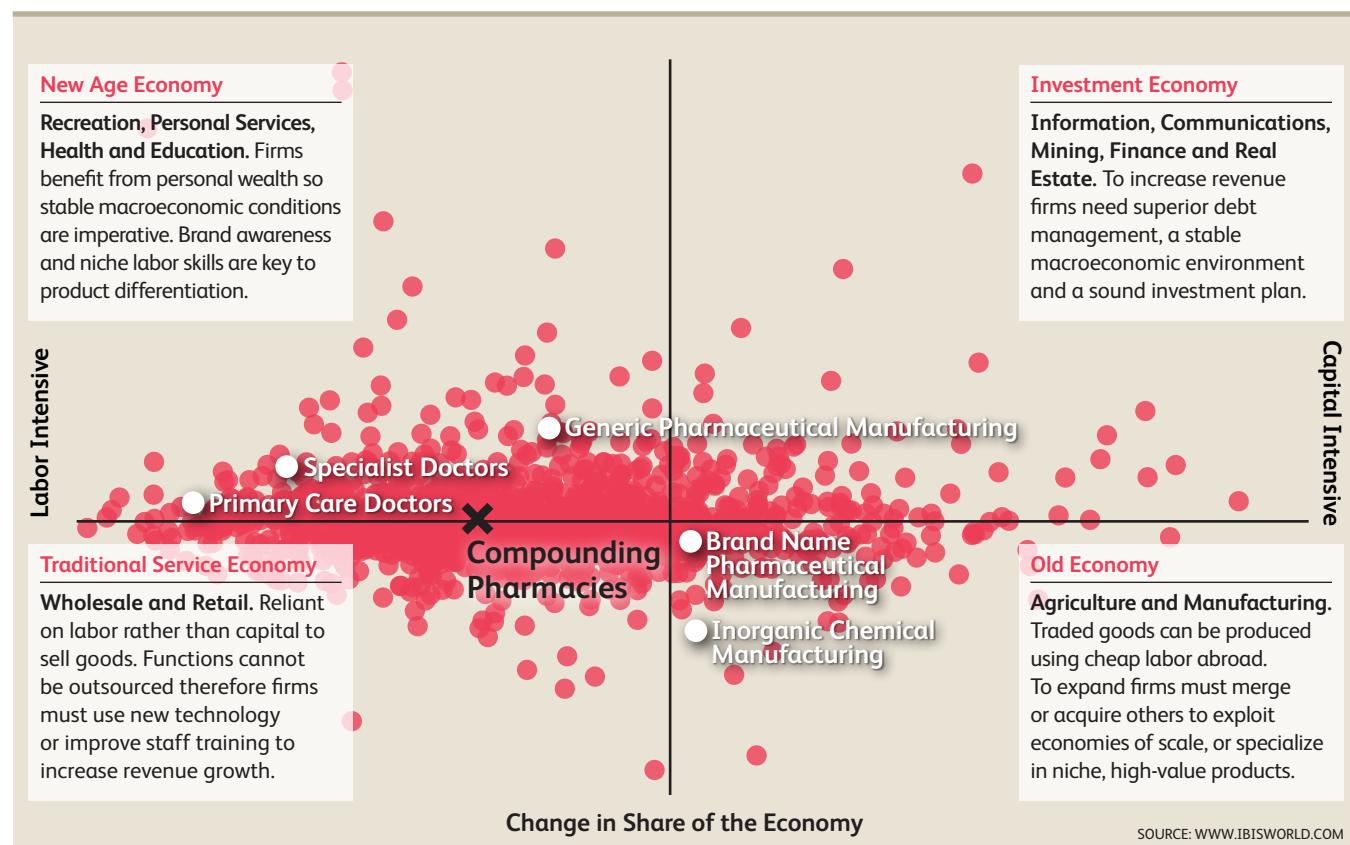
Capital units per labor unit



Dotted line shows a high level of capital intensity

SOURCE: WWW.IBISWORLD.COM

Tools of the Trade: Growth Strategies for Success



Operating Conditions

Technology & Systems

Level

The level of Technology Change is **Low**

The Compounding Pharmacies industry exhibits a low level of technology change. While a compounding pharmacy needs a laboratory to operate, the main tools and devices in the laboratory, such as a mortar and pestle, precision scale and centrifuge, have not changed significantly during the past five years. Compounding pharmacies do not undergo the technology change of similar industries,

such as the Pharmacies and Drug Stores industry (IBISWorld report 44611) or the Generic Pharmaceutical Manufacturing industry (IBISWorld report 32541b), because the technology change in these industries occurs primarily to improve mass production and tracking of large inventories. Because compounding pharmacies operate on a small scale, they have no use for these technology changes.

Revenue Volatility

Level

The level of Volatility is **Medium**

The Compounding Pharmacies industry exhibits moderate revenue volatility. Demand for industry services remains relatively stable, due to many patients' need-based demand for compounded medications. For example, many patients use compounding pharmacies for medical needs, such as prescriptions that are specially mixed or altered for patients that cannot swallow manufactured prescriptions or dye-free and gluten-free medications for patients with allergies.

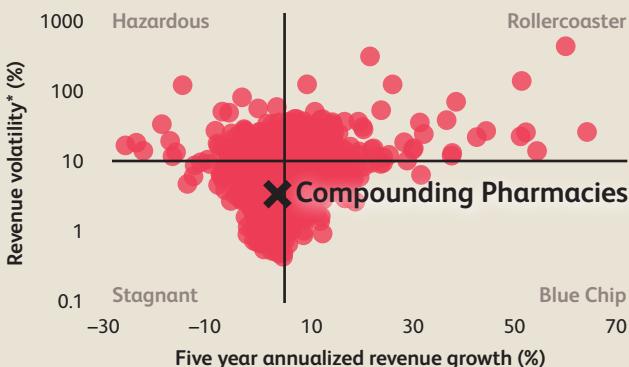
In addition, the aging of baby boomers has led to an increase in

demand for pharmaceuticals, because senior citizens are more likely to suffer with multiple chronic illnesses, which stimulates demand for prescriptions. Nevertheless, negative media attention, which shed light on patient death and illnesses related to contaminated compounded medications, caused many consumers to curb their demand for compounded prescriptions. However, over the next five years, as more compounding pharmacies register with the FDA, revenue volatility will decrease.

A higher level of revenue volatility implies greater industry risk. Volatility can negatively affect long-term strategic decisions, such as the time frame for capital investment.

When a firm makes poor investment decisions it may face underutilized capacity if demand suddenly falls, or capacity constraints if it rises quickly.

Volatility vs Growth



* Axis is in logarithmic scale

SOURCE: WWW.IBISWORLD.COM

Operating Conditions

Regulation & Policy

Level & Trend

The level of Regulation is **Heavy** and the trend is **Steady**

Pharmacies face heavy regulation at the local and state levels, which includes compounding pharmacies. A compounding pharmacy must receive a license from the state to operate. On the federal level, the Compounding Pharmacies industry currently operates in a legal gray area. The Food and Drug Administration (FDA) is charged with rigorously testing any new drugs before they are available on the market. In the 1990s, when compounding pharmacies were rising quickly in popularity, the FDA asserted that compounding created new drugs. In response to compounding pharmacies not submitting these new drugs to the FDA for testing (which is expensive and usually takes several years to gain approval), the FDA claimed that their actions were illegal. Nevertheless, the FDA did not dispute that compounding pharmacies play a necessary role in modern medicine, so it would use its regulatory power to take action against compounding pharmacies that it viewed as mimicking a pharmaceutical manufacturing operation. As a result, the FDA may investigate pharmacies that compound drugs in anticipation of future prescriptions or compound drugs banned by the FDA or with ingredients banned by the FDA. The FDA may also investigate pharmacies that compound drugs for resale by a third party and use commercial-sale pharmaceutical equipment.

Federal Food, Drug and Cosmetic Act

Section 503A of the Federal Food, Drug and Cosmetic Act (FDCA) was passed in 1997, which states that compounding pharmacies are subject to FDA regulations. It also provided limited exemptions to these regulations for compounding pharmacies, if the compounding pharmacies did not advertise, promote or solicit business or inform physicians of the specific drugs they compound. A group of compounding

pharmacies sued the FDA, claiming that these restrictions violated their rights to free speech. In 2002, the US Supreme Court agreed with this claim, and it voided the section as part of the case *Thompson v. Western States Medical Center*. Nevertheless, the US Supreme Court did not rule on whether the advertising ban was severable from the rest of the section. If it is severable, that would mean the advertising ban alone could be struck down, but the rest of the section (which asserts that compounding pharmacies are subject to FDA regulations, with some exemptions) would be upheld. If it is not severable, that would mean that all of Section 504A is unconstitutional, removing the ability of the FDA to regulate compounding pharmacies.

Subsequent rulings on the severability of the advertising ban in Section 504A have been contradictory. In 2006, the US District Court for the Western District of Texas (in the case of *Medical Center v. Mukasey*) ruled that the advertising ban was severable from the rest of Section 504A, but that compounded drugs are exempt from FDA regulations on new drugs. However, in 2008, the US Court of Appeals for the Fifth District rejected that decision, asserting that compounded drugs are in fact new drugs that are subject to FDA regulation. Also, the ruling agreed that the advertising ban may be severed from the remainder of Section 504A. Other circuit courts have ruled that the advertising ban is not severable, and instead, all of Section 504A is void.

Compounding Quality Act

In 2014, the FDA passed the Compounding Quality Act, which requires pharmacies to register as an outsourcing facility if they compound sterile drugs. The outsourcing facility must meet specific conditions to be exempt from the FDCA's drug approval requirements. For example, drugs must

Operating Conditions

Regulation & Policy continued

be manufactured in facilities that are compliant with current good manufacturing practices, or under the supervision of a licensed pharmacist at a

registered facility. For drugs produced by compounding pharmacies that are not outsourcing facilities they must meet regulations of section 503A.

Industry Assistance

Level & Trend

The level of Industry Assistance is **Low** and the trend is **Steady**

The Compounding Pharmacies industry receives no direct assistance from the government. However, operators receive some assistance from industry associations. The Professional Compounding Centers of America is a professional network of pharmacists and a resource for chemicals, equipment, accredited training and education and management and marketing consultation. In addition, the Pharmacy Compounding Accreditation Board provides accreditation for

compounding pharmacists, which provides a competitive edge over nonaccredited pharmacies.

In addition, compounding pharmacies receive indirect assistance from health insurance programs, both public and private. Some health insurance plans will reimburse consumers who purchase pharmaceuticals from compounding pharmacies. By reimbursing consumers that purchase compounded medications, health insurance providers are indirectly supporting demand for compounding pharmacies.

Key Statistics

Industry Data

	Revenue (\$m)	Industry Value Added (\$m)	Establish- ments	Enterprises	Employment	Exports	Imports	Wages (\$m)	Domestic Demand	Number of adults aged 65 and older (Mil people)
2006	4,576.1	3,088.3	7,001	5,474	119,828	--	--	1,993.1	N/A	37.2
2007	4,586.6	3,284.2	6,964	5,331	111,230	--	--	2,169.0	N/A	37.8
2008	4,871.7	3,336.8	7,026	5,379	107,340	--	--	2,093.6	N/A	38.8
2009	4,876.2	3,396.7	7,188	5,505	108,938	--	--	2,169.9	N/A	39.6
2010	4,998.3	3,448.3	7,346	5,317	110,375	--	--	2,149.8	N/A	40.5
2011	4,968.5	3,554.8	7,523	5,346	111,562	--	--	2,214.7	N/A	41.4
2012	5,150.3	3,610.3	7,620	5,405	113,255	--	--	2,153.3	N/A	43.1
2013	5,187.0	3,734.1	7,826	5,447	115,343	--	--	2,235.6	N/A	44.6
2014	5,251.9	3,922.5	7,990	5,515	117,400	--	--	2,398.5	N/A	46.2
2015	5,634.9	4,181.1	8,102	5,513	116,939	--	--	2,434.0	N/A	47.8
2016	5,820.8	4,290.1	8,208	5,558	116,861	--	--	2,474.0	N/A	49.3
2017	5,989.7	4,579.6	8,314	5,563	117,498	--	--	2,705.0	N/A	50.9
2018	6,073.5	4,593.3	8,464	5,605	118,321	--	--	2,880.0	N/A	52.5
2019	6,237.5	4,740.6	8,470	5,623	118,366	--	--	2,876.0	N/A	54.2
2020	6,399.7	4,706.5	8,557	5,643	118,455	--	--	2,880.0	N/A	56.0

Annual Change

	Revenue (%)	Industry Value Added (%)	Establish- ments (%)	Enterprises (%)	Employment (%)	Exports (%)	Imports (%)	Wages (%)	Domestic Demand (%)	Number of adults aged 65 and older (%)
2007	0.2	6.3	-0.5	-2.6	-7.2	N/A	N/A	8.8	N/A	1.8
2008	6.2	1.6	0.9	0.9	-3.5	N/A	N/A	-3.5	N/A	2.5
2009	0.1	1.8	2.3	2.3	1.5	N/A	N/A	3.6	N/A	2.2
2010	2.5	1.5	2.2	-3.4	1.3	N/A	N/A	-0.9	N/A	2.2
2011	-0.6	3.1	2.4	0.5	1.1	N/A	N/A	3.0	N/A	2.2
2012	3.7	1.6	1.3	1.1	1.5	N/A	N/A	-2.8	N/A	4.3
2013	0.7	3.4	2.7	0.8	1.8	N/A	N/A	3.8	N/A	3.5
2014	1.3	5.0	2.1	1.2	1.8	N/A	N/A	7.3	N/A	3.5
2015	7.3	6.6	1.4	0.0	-0.4	N/A	N/A	1.5	N/A	3.5
2016	3.3	2.6	1.3	0.8	-0.1	N/A	N/A	1.6	N/A	3.2
2017	2.9	6.7	1.3	0.1	0.5	N/A	N/A	9.3	N/A	3.2
2018	1.4	0.3	1.8	0.8	0.7	N/A	N/A	6.5	N/A	3.2
2019	2.7	3.2	0.1	0.3	0.0	N/A	N/A	-0.1	N/A	3.2
2020	2.6	-0.7	1.0	0.4	0.1	N/A	N/A	0.1	N/A	3.3

Key Ratios

	IVA/Revenue (%)	Imports/ Demand (%)	Exports/ Revenue (%)	Revenue per Employee (\$'000)	Wages/Revenue (%)	Employees per Est.	Average Wage (\$)	Share of the Economy (%)
2006	67.49	N/A	N/A	38.19	43.55	17.12	16,633.01	0.02
2007	71.60	N/A	N/A	41.24	47.29	15.97	19,500.13	0.02
2008	68.49	N/A	N/A	45.39	42.97	15.28	19,504.38	0.02
2009	69.66	N/A	N/A	44.76	44.50	15.16	19,918.67	0.02
2010	68.99	N/A	N/A	45.28	43.01	15.03	19,477.24	0.02
2011	71.55	N/A	N/A	44.54	44.57	14.83	19,851.74	0.02
2012	70.10	N/A	N/A	45.48	41.81	14.86	19,012.85	0.02
2013	71.99	N/A	N/A	44.97	43.10	14.74	19,382.19	0.02
2014	74.69	N/A	N/A	44.74	45.67	14.69	20,430.15	0.02
2015	74.20	N/A	N/A	48.19	43.20	14.43	20,814.27	0.03
2016	73.70	N/A	N/A	49.81	42.50	14.24	21,170.45	0.03
2017	76.46	N/A	N/A	50.98	45.16	14.13	23,021.67	0.03
2018	75.63	N/A	N/A	51.33	47.42	13.98	24,340.57	0.03
2019	76.00	N/A	N/A	52.70	46.11	13.97	24,297.52	0.03
2020	73.54	N/A	N/A	54.03	45.00	13.84	24,313.03	0.02

Jargon & Glossary

Industry Jargon

FOOD AND DRUG ADMINISTRATION (FDA) An agency of the US Department of Health and Human Services that is responsible for the regulation and supervision of prescription and over-the-counter pharmaceutical drugs.

MORTAR AND PESTLE Tool used to crush, grind and mix solid substances.

PHARMACEUTICAL COMPOUNDING The creation of a specific pharmaceutical product to fit the unique needs of a patient.

TRANSDERMAL A method of pharmaceutical application in which medications are absorbed through the skin as an alternative to other forms of ingestion.

IBISWorld Glossary

BARRIERS TO ENTRY High barriers to entry mean that new companies struggle to enter an industry, while low barriers mean it is easy for new companies to enter an industry.

CAPITAL INTENSITY Compares the amount of money spent on capital (plant, machinery and equipment) with that spent on labor. IBISWorld uses the ratio of depreciation to wages as a proxy for capital intensity. High capital intensity is more than \$0.333 of capital to \$1 of labor; medium is \$0.125 to \$0.333 of capital to \$1 of labor; low is less than \$0.125 of capital for every \$1 of labor.

CONSTANT PRICES The dollar figures in the Key Statistics table, including forecasts, are adjusted for inflation using the current year (i.e. year published) as the base year. This removes the impact of changes in the purchasing power of the dollar, leaving only the "real" growth or decline in industry metrics. The inflation adjustments in IBISWorld's reports are made using the US Bureau of Economic Analysis' implicit GDP price deflator.

DOMESTIC DEMAND Spending on industry goods and services within the United States, regardless of their country of origin. It is derived by adding imports to industry revenue, and then subtracting exports.

EMPLOYMENT The number of permanent, part-time, temporary and seasonal employees, working proprietors, partners, managers and executives within the industry.

ENTERPRISE A division that is separately managed and keeps management accounts. Each enterprise consists of one or more establishments that are under common ownership or control.

ESTABLISHMENT The smallest type of accounting unit within an enterprise, an establishment is a single physical location where business is conducted or where services or industrial operations are performed. Multiple establishments under common control make up an enterprise.

EXPORTS Total value of industry goods and services sold by US companies to customers abroad.

IMPORTS Total value of industry goods and services brought in from foreign countries to be sold in the United States.

INDUSTRY CONCENTRATION An indicator of the dominance of the top four players in an industry. Concentration is considered high if the top players account for more than 70% of industry revenue. Medium is 40% to 70% of industry revenue. Low is less than 40%.

INDUSTRY REVENUE The total sales of industry goods and services (exclusive of excise and sales tax); subsidies on production; all other operating income from outside the firm (such as commission income, repair and service income, and rent, leasing and hiring income); and capital work done by rental or lease. Receipts from interest royalties, dividends and the sale of fixed tangible assets are excluded.

INDUSTRY VALUE ADDED (IVA) The market value of goods and services produced by the industry minus the cost of goods and services used in production. IVA is also described as the industry's contribution to GDP, or profit plus wages and depreciation.

INTERNATIONAL TRADE The level of international trade is determined by ratios of exports to revenue and imports to domestic demand. For exports/revenue: low is less than 5%, medium is 5% to 20%, and high is more than 20%. Imports/domestic demand: low is less than 5%, medium is 5% to 35%, and high is more than 35%.

LIFE CYCLE All industries go through periods of growth, maturity and decline. IBISWorld determines an industry's life cycle by considering its growth rate (measured by IVA) compared with GDP; the growth rate of the number of establishments; the amount of change the industry's products are undergoing; the rate of technological change; and the level of customer acceptance of industry products and services.

NONEMPLOYING ESTABLISHMENT Businesses with no paid employment or payroll, also known as nonemployers. These are mostly set up by self-employed individuals.

PROFIT IBISWorld uses earnings before interest and tax (EBIT) as an indicator of a company's profitability. It is calculated as revenue minus expenses, excluding interest and tax.

Jargon & Glossary

IBISWorld Glossary continued

VOLATILITY The level of volatility is determined by averaging the absolute change in revenue in each of the past five years. Volatility levels: very high is more than $\pm 20\%$; high volatility is $\pm 10\%$ to $\pm 20\%$; moderate volatility is $\pm 3\%$ to $\pm 10\%$; and low volatility is less than $\pm 3\%$.

WAGES The gross total wages and salaries of all employees in the industry. The cost of benefits is also included in this figure.

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